DOCUMENT RESUME

ED 113 858 EC 080 092

AUTHOR Kass, Corrine E.
TITLE A Theoretical Context for Handicap in Learning.
PUB DATE 75
NOTE 13p.; Paper presented at the Conference of the International Scientific Federation of Learning Disabilities (2nd, Brussels, Belgium, January 3-7, 1975)

EDRS PRICE MF-$0.76 HC-$1.58 Plus Postage
DESCRIPTORS Child Development; *Cognitive Development; Definitions; Exceptional Child Education; *Learning Disabilities; *Learning Theories; *Remedial Instruction; *Task Analysis
IDENTIFIERS *Dyssymbolia

ABSTRACT

Presented is a theory of learning handicaps based on psychoeducational and developmental considerations. Identified are five of the author's biases about remediation such as the tendency for teachers to continue remediation beyond the point of usefulness. Proposed is the existence of five task requirements such as attending to the task, attaching labels to the task, and expressing the task activity. Discussed in terms of normal age ranges and remediation are the following developmental functions: sensory orientation (0-3 years), memory (3-7 years), re-cognition with a vocabulary emphasis (8 to 11 years), synthesis (11-13 years), and communication (14 years and up). The author suggests that remediation is most effective when the function disability is diagnosed within the critical age range. Also defined is a term, dyssymbolia, to be used to describe a handicap in dealing with symbols. The condition is defined in terms of four criteria: deviance, the possibility of normal achievement, the presence of the handicap into maturity, and an etiology found within developmental dysfunctions. (DB)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDPS are the best that can be made from the original. *
****

ED113858

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

A THEORETICAL CONTEXT FOR HANDICAP IN LEARNING

Speech given by Corrine E. Kass

International Federation of Learning Disabilities
Conference in Brussels, January, 1975

A theoretical context requires a practical context as well. I wish to deal with the interrelationship of the two in my speech this morning. Theory names; practice provides the meaning. Theory attempts to answer the question, "What ought to be done?;" practice attempts to answer the question, "What can be done?" Perhaps you will recognize the conflict between the professional and the political in this distinction. Professionally, we are concerned with what we ought to do and politically, we are concerned with what we can do.

I would like to begin my speech with some remarks about communication. Since theory names, it is important to set the tone for these names, or words. The main thing to remember is that words are symbols and as such, we can make them work for us. The tone that I would like to set is one that I have culled from a book, Habit and Habitat by Robert Theobald. In this book, Robert Theobald has suggested that we have moved out of the Industrial Era into a Communication Era. The Communication Era, he suggests, is characterized by a language defined as "a blabbermouth language, written on psychic tissue paper." In order for that language to be used. there are three criteria that are necessary: (1) we need credible information to be shared, (2) we need trusted others with whom to share this information, and (3) action must be possible on the basis of the shared information. Today I would like to share some of my partial insights with you. I am going to label some concepts about handicap in learning from the point of view of deviation. Deviation means qualitative

EC080092

as well as quantitative difference from the normal. You may characterize me as a "deviationist," and the study of deviation we'll call "deviology."

Now, understanding about deviation really has to start from remediation. The important question always in dealing with a problem is what to do about it. What I would like to do first is give you some Kass biases about remediation. I'll just choose a few because I don't want to do a lot of tearing down, but I do want to point out some of the misapplications in remediation that I have noted over the years.

First, remediation should not be continued beyond the point of its usefulness. I have seen many teachers doing the same remedial tasks for two to three years when it is not necessary. It seems to me that teaching, in the remediation sense, is the work of the teacher and should be done quickly. We have to "will" the improved response into the child. In other words, the teacher has to have the stomachache. In remediation, we must not dilly-dally around too much waiting for children to second-guess the correct response or to continue "learning" a skill they already possess.

Another bias that I have is the projection of adult feelings on to children. You know the term "anthropomorphism," ascribing to the deity attributes of the human being. Arthur Koestler coined the term "ratomorphism," which means ascribing to the human being attributes of the rat. I'd like to coin a new word, "adultism," meaning ascribing to the child the feelings of the adult. We say the child must be bored because we would be bored. Theoretically, we have to look at what is relevant at each age range. In behaviorism, students are taught to talk about behavior. If somebody says that a child is bored, the teacher might say, "how do you know?" The reply may be, "He stared off into

space." Well, turn this around for a moment and see how silly that is. What if a child said to us, "I'm scared," and we say to him, "How do you know you're scared?" He says, "Because I'm shaking." That's not the way the human being reflects his own feelings, not by the action itself.

A third bias has to do with demonstrations on normal children of methods and materials. This is dangerous, I feel, because there is no connection between what is observed and the problems for which the methods and materials are designed. If the child is learning normally, what we do for the sub-normal is not applicable. It is not necessary. Later, I'll be discussing developmental functions and why tasks for an earlier function make no sense for a later function.

Another bias is that, while differentness may be dramatic, success in remediation usually is not dramatic. We tell stories about the problems we have seen and what happens to the Lee Harvey Oswald's, but I have noted in my experience that when the symptoms have been successfully remediated, the parents might say something like, "my child is being helped," and that is all. There is no way that we can prove that change wouldn't have happened without the help. We must be careful not to dramatize remediation.

A fifth bias regards chronological age versus mental age. Chronological age is a critical factor in remediation. Mental age may be a concept that is useful in the area of mental retardation, but it is not useful in designing remediation for learning disabilities.

Let me hasten on now to theory. The best way I can introduce this particular theoretical context is to give you a natural history of how I have used theory in remediation. As you probably know, I

did my work at the University of Illinois where one of the first theories that I learned was the communication theory of Charles Osgood on which the ITPA was based. James McCarthy spoke on that subject at the start of this conference. In my clinical work, I found the three levels of Osgood were useful for planning remediation. The first level is the "projection" level, the second, "integration" level, and the third "representation" level. For remediation, I designed synonym phrases that would reflect the meaning that I attributed to these levels. The synonym phrase for projection level was "matching or copying." The synonym phrase for integration level was "reproducing from memory." The synonym phrase for representation level was "understanding through symbols." Now, you can see how this would dictate remediation. If the child could not copy or imitate, that, of course, had to be the remediation plan. However, if he could copy or trace, that would be a waste of time in remediation. For example, in the Fernald method the tracing step could be dropped if the problem were at the integration level (or reproducing from memory). If the child could reproduce something from memory, but could not understand directions (representation level), then obviously the remediation had to be something else again. The previous activities could be eliminated and only connected vocabulary would be necessary, something like the "neurological impress" method.

In using these three levels, however, I soon became puzzled about the integration level. Reproducing from memory seemed to have two levels, one was just simple rote imitation, and the other seemed to be a high level automatic skill which included concepts. It seemed to me that we could talk about four levels: projection level, integration level I, representation level, integration level II. And when I tried to put these into age-related levels, I found that I needed to consider how

each new learning task regardless of age was acquired by the human.

Another dimension of the Osgood theory of communication is that of processes. The processes are: decoding, association, and encoding. Three processes are typically noted in behavioral science by such labels as input, feedback, output; reception, association, expression; receiving, processing, transmitting. In the Osgood and Miron book that Dr. McCarthy mentioned the other day, Approaches to the Study of Aphasia, there is a coding system in the appendix that Miron worked out for classifying test activities in reference to levels, processes, and channels. I began having my students do such coding in order to plan remediation according to the process deficits as well as level deficits. Again, I found something missing. Remediation simply did not fit well enough. Therefore, I added two more processes. Before reception, there is awareness. First, it is necessary to gain attention. I called this the Sensory Awareness process. Next, I added a memory process. I went to several other theories also: Piaget, Guilford, and psychoanalytic theory as described in a book called From learning for love to love of learning edited by Motto and Ekstein.

You know the saying, "If you put new wine in old wineskins, the wineskins will burst, spilling the new wine." I decided that I had to design new words for all these processes and levels. The critical feature of this theory is age.

I propose five developmental functions within the organism and five task requirements. We have to distinguish between theorizing about what is inside the skin and looking at the task. In the one case, we are proposing hypothetical constructs. The tasks themselves can be analyzed in relation to these, so we have a two-dimensional activity here. Let me name the five task requirements, and then go through

the five developmental functions. In dealing with any learning, the first requirement is that the task be attended to. Second, labels must be present for the parts of the task or the task as a whole. Third, understanding how to carry out the task is necessary. Fourth, mastering the task in an integrated fashion occurs. Fifth, being able to express what one has done is a final requirement.

Now let me go through the functions: The first theoretical function I call Sensory Orientation, which is the physiological or the functional readiness of the organism to respond. William James once wrote that only an infant can have pure sensation; that when concepts come into being, sensations are forever colored. Sensory Orientation is the foundation for perceiving. You heard Dr. Barsch talk about how important it is for the tactual sense for the baby to be touched. When it comes to deviation, if the young child before age three seems to be having difficulty with this function, he may be blind or deaf, or have some difficulty receiving through the senses. The best time, of course, to diagnose this is within the first two years of life. Later, if the difficulty is diagnosed to have been in that function, the remediation is different from the remediation within the critical age range.

The second theoretical function (from approximately age 3 to 7) is memory. Memory refers to the imitation of models and the recall of those models later. The young child is peculiarly gifted in repeating anything. I once watched a film of children singing "My Country, 'Tis of Thee" and as the film went across their faces, they were singing anything that they thought were the words with total unselfconsciousness We know from the literature that young children can learn a number of languages before age 7 with relatively little difficulty. When there

is deviation in memory, it should be caught in those early years and then memory exercises should be carried out. Once the child gets beyond the age of 8, a defective memory becomes a bad habit and many of the difficulties with symbols become nothing more than bad habits. There's another deviation in memory that is quite interesting and that's too good a memory. Each of these functions has its day, and should not continue beyond it. Luria wrote a biographical sketch of a mnemonist, a man who couldn't forget anything. He was pathological.

A third theoretical function is Re-cognition. Roughly from age 8 to 11, the child shows a change in sensory cognition through the acquisition of personal meanings. Children of this age tell riddles, they take directions literally, they make up jokes; in short, they discover that words will work for them. They can now start dealing with multiple meanings. This is when vocabulary training is so important.

The fourth theoretical function is called Synthesis which develops approximately at ages 11 to 13. The early skills in the three R's become automatic. When there is difficulty in synthesis, it is most difficult to remediate. That is because there has been a habituation of the system to responding, and this can't be undone unless you do what is known in psychology as counter-conditioning or unlearning. We have to double the steps in remediation, first moving backward through the incorrect learning and then forward through the correct learning. You know how hard it is to get rid of a habit. In remediation, it seems the teacher has to "will" the child into relearning.

The fifth theoretical function is called Communication and occurs from age 14 up. Communication means being able to express one's own

ideas, and that is deepest in the recesses of a human being. We have to struggle to reconstruct our thoughts in order to express them. Obviously, there is a memorized fund of expressions, but communication involves more. In my view, the result of bringing abstract reasoning into the curriculum too soon prevents children from learning how to do abstract reasoning. I see it in university students today in that they want to please the teacher, they want to know exactly what the assignment is before they do it. In fact, they appear to be so unready for communication that they want to be sure they are doing what the teacher wants. The time to teach communication is at the high school level. That's when we ought to give children an opportunity to try their ideas.

Unfortunately for the curriculum, we have lost sight of age-related functions. In a little book by Bruner (1963), The Process of Education, he suggested that what we needed in curriculum were the best minds in any subject matter making the curriculum in that subject matter. Out of that suggestion came the new math and science curricula. We didn't stop to think that maybe the best minds in any subject matter were not knowledgeable in the principles of child development. Even though Bruner in 1966 in his Toward a Theory of Instruction did say we must follow the principles of child development, the slow grinding wheels of education stayed with the first suggestion for too long.

Now, let's just take a brief look at remediation in relation to the theoretical functions. Remediation is relatively straightforward if the difficulty is noticed within the given age range. Then we can deal with the symptoms. If the difficulty is caught when the child is past the critical age range, we double the steps in remediation because then we

have to go backward and first have the child understand what he did wrong, and then move forward toward relearning.

Now this is theoretical, as I mentioned before, and research must be done to validate theory. At the University of Arizona, my doctoral students and I have started a series of research studies in which we are exploring characteristics of learning disability at the various age levels. The first article on the series of studies will be in the February or March issue of Journal of Learning Disabilities. Over time, we hope to distinguish sets of characteristics for this handicap.

Now, I want to take the rest of this time to present and define a new label. During my sabbatical leave this past semester, I have been reading several great books. I explored Orton again, and read Symbol Formation by Werner and Kaplan. I've come to feel that the critical word for the handicap with which we are concerned is "symbols." A term that Orton suggested in 1926 was strephosymbolia, meaning "twisted symbols." The term I propose is "dyssymbolia," which refers to a handicap in dealing with symbols. One of the difficulties with the term "learning disabilities," in my view, is that the label is synonymous with the characteristics of the condition, and so there is a kind of circularity. Also, I believe the term came about more for political than for professional reasons. A professional term remains esoteric for a long time as a label for professionals rather than for the general public.

Now, in order for dyssymbolia to be so diagnosed, four criteria must be met--not one, or two, or three, but all four must be met:

The first criterion is that the symptoms of the handicap must be deviant. Differentness is obvious. You've heard that the handicap is

subtle. A better adjective would be "insidious." All that's subtle about dyssymbolia is that we don't understand the characteristics or sets of characteristics. Handicap itself is not subtle. Everyone notices differentness. Many years ago, Charles Van Riper defined speech problems as those which deviate so far from the normal that they call attention to themselves... Unfortunately, with our ideas of prevention and getting everyone that needs help, we look at the gray area. We set the cut-off point between subnormality and normality higher and higher. When we do this, we immediately set off social and educational debate. Whose to say that the lowest one just about the cut-off point is different from the one at the highest point just below the cut-off point. We have to look at qualitative difference as well as quantitative difference. Our best bet is to look for the obviously-different. I often ask my students which mistake they would rather make, "would you rather put more children in a program even if they don't need it in hopes of getting all who need it, or would you prefer to not catch some children who might need it in hopes of keeping those out who do not need the service?" My students usually choose the first. I'd prefer to make the second. Economically, societally, and personally, it is more costly to name symptoms pathological when they are not. Deviant symptoms vary with age, and if the handicap is missed at one age, it might be picked up at another.

The second criterion is that normal achievement is possible. That, of course, allows for the whole range of acceptable behaviors. It's typical to use IQ scores to predict normal achievement. I have come to use a concept devised by Jastak, which he called the Altitude Quotient. The Altitude Quotient is the higher score on a set of tests. Jastak

suggested that if we brought up a child's low areas, he could be expected to operate at the level of his highest score. In learning disabilities, of course, what that score reflects makes a difference. Obviously, if it's on a test of motor expression, it is not a good altitude quotient because motor expression is not indicative of normal achievement possibilities. But, if it is a score on a vocabulary test, it would be adequate to use as an altitude quotient.

The third criterion is that the handicap remains into maturity. Remember that old definition of Edgar Doll in which one of the characteristics of mental retardation was "it obtains at maturity." What this says is that if a person has a handicap, it remains with them. Symptoms will vary and we can't always be sure when we diagnose dyssymbolia in early childhood whether it will remain, but we can collect longitudinal research data to help us predict. Recently, I had the opportunity to deal with adults with interesting problems. I saw a young fireman who was about to be fired because he would not drive the emergency run. This young man could not hold the map of the city in his mind. As he said to me, "I can't look at the map on the dashboard and drive too and get there in record time, I might kill somebody." He had had trouble in school, but with remedial work, he had graduated from high school. The method that the remedial teacher had used was to teach him to sound out everything. He had no ability to see a word in his mind. In some jobs, this would not have made any difference and the symptom might not have surfaced. Normal achievement is possible in dyssymbolia, all other things being equal; that is, if jobs do not call upon weaknesses connected with the handicap.

The fourth criterion is that the etiology of the symptoms of

dyssymbolia is to be found within developmental dysfunctions. Granted, there are neurological antecedents that must be studied, but from my point of view, I prefer to work from the psychoeducational antecedents. In answering the questions, "what should be done,?" and "what can be done?" we are dealing with the conflict between the political and the professional. Do you know the story of the Greek mythological hero, Sisyphus? Sisyphus was a great teacher who had great gifts that he gave away. The gods became angry at him and doomed him to roll a huge stone up a mountain for the rest of his life. Of course, it became too heavy and would come crashing down, and he had to start over again. That is what practice and theory are like. Neither can ever win--we can only keep on trying, even if it is a Sisyphian labor.